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EXAMINER

SINGH, SUNIL

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3672

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/772,331	Applicant(s) SCHERMEL, FERDINAND	
	Examiner Sunil Singh	Art Unit 3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 107-127 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 107-127 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2010 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 107-112,114-128 have been renumbered as claims 107-127 via Rule 1.126

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "14" and "19" have both been used to designate connecting bar (page 10). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "12" has been used to designate both projection and protrusion (page 11). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If

Art Unit: 3672

the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "2" has been used to designate both buttocks section (page 13) and thigh section (page 14). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "3" has been used to designate both thigh section (page 13) and buttocks section (page 16). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37

Art Unit: 3672

CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to under 37 CFR 1.83(a) because they fail to show 17BK as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 107-127 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are replete with indefiniteness and antecedent basis that are too numerous to mention each one specifically. Applicant should review all claims and make corrections accordingly. Some examples are noted.

Claim 1 line 12, "said track section" lacks clear antecedent basis.

Claim 1 line 16, "said coplanar thigh/calve section" lacks clear antecedent basis.

Claim 1 line 17, "bed" should relate back to the "bed" called for in line 1.

Claim 17, "an adjoining edge" appears as if it should be related back to "abutting edges" called for at line 9.

Claim 108 line 2, "two independent sections" is called for; however, it appears as if it should be related back to "thigh/calve section" called for in claim 107.

Claim 108, "a coplanar thigh/calve liner actuator" is called for; however, it appears as if it should be related back to "thigh/calve linear actuator" called for in claim 107.

Claim 108 is confusing because it is not clear how the "knee linear actuator" and the "knee elevation support member" relate to the "thigh/calve" section and/or actuator.

Claim 108 line 8, "said coplanar calve/thigh linear actuator" lacks clear antecedent basis.

Art Unit: 3672

Claim 108 lines 8-9, "said coplanar thigh/calve section" lacks clear antecedent basis.

Claim 108 is confusing because it is not clear how when the knee liner actuator locks the thigh and calve sections; how they can move pivotally about each other.

Claim 108 line 15, "bed" should be related back to "bed" of claim 108 line 1.

Claim 109 line 2, "said calves" lack clear antecedent basis.

Claim 110 is confusing. At line 4, "the horizontal plane of said track" is called for; however, claim 107 line 16 calls for "a horizontal plane of bed"; it is unclear if they should be related.

Claim 111, "said coplanar thigh/calve section" lacks clear antecedent basis.

Claim 112, "to side of said mattress" is grammatically awkward.

Claim 113, "said armrest" lacks clear antecedent basis.

Claim 116, "they accessible" is grammatically awkward.

Claim 117, "the calves section of said coplanar leg section" is confusing.

Claim 118 "the calves section" and "said coplanar thigh calve section" lacks clear antecedent basis.

Claim 119, "said bed surface", "said surface of high coefficient", "said buttocks portion of said mattress", "said surface of low coefficient of friction", "back portion of mattress" all lack clear antecedent basis.

Claim 120, "said releasable holding device" and "the mattress element" lack clear antecedent basis.

Claim 121 "box spring" should be --a box spring--.

Claim 122 line 7, "threaded rod" should be --a threaded rod--.

Art Unit: 3672

Claim 122 line 10, "threaded rod" should be --the threaded rod--.

Claim 123 line 2, "said calves section" lacks clear antecedent basis.

Claim 123 line 3, "moved along length" is incomplete.

Claim 124 line 2, "said arm rests" lacks clear antecedent basis.

Claim 125 line 3, "the back section of the mattress" lacks clear antecedent basis.

Claim 126 is rejected as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: how "a swing arm and armrests" relate to rest of the bed.

Insofar the claims are understood, the following rejection(s) below apply:

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

9. Claims 107,110,118,125 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese document (2002-331005).

Japanese document '005 discloses a multi-position reclining bed comprising:
a horizontally situated elongated track (5), a plurality of supporting elements (see Fig. 1) positioned above and overlying said track, and moveably coupled thereto, and comprising:

Art Unit: 3672

- i. a back section (9,11), moved by back linear actuator (34,36);
 - ii. a buttocks section (6), moved by buttocks linear actuator (13,14); and
 - iii. a thigh/calve section (10,12), moved by a thigh/calve linear actuator (35,37) said supporting elements being pivotably connected to each other at abutting edges and
- c. said back linear actuator coupled to the supporting elements, said back section being coupled to said track section and configured to move an end portion thereof vertically in a vertical plane when, said back linear actuator is activated, such that when said back section is raised or lowered, said end portion remains substantially the same distance from an adjacent wall (see Figs. 2,3), and wherein said thigh/calve section reclines pivotally below a horizontal plane of bed in a downward (see Fig. 1) direction pivotally about an adjoining edge with said buttocks section, a mattress (see Fig. 1) that rests on said plurality of supporting elements.

10. Claim 126 is rejected under 35 U.S.C. 102(b) as being anticipated by Johnston et al. (US 4409695).

Johnston et al. discloses a multi-position reclining bed comprising:

- a. a horizontally situated elongated track,
- b. a plurality of supporting elements positioned above and overlying said track, and moveably coupled thereto, and comprising:
 - i. a back section, moved by back linear actuator;
 - ii. a thigh/calve section, moved by a thigh/calve linear actuator

Art Unit: 3672

said supporting elements being pivotably connected to each other at abutting edges and a swing arm and armrests, wherein said swing arm is attached to said supporting elements and said arm rests are attached to said swing arm (see disclosure).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 108-109, 111, 120, 121, 122 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese document '005 in view of Miller et al. (US 4494259).

Japanese document discloses the invention substantially as claimed. However, Japanese document '005 lacks a pivot fixture (cantilever mechanism). Miller et al. teaches a pivot fixture (cantilever mechanism) (see Figs. 17-19). It would have been considered obvious to one of ordinary skill in the art to modify Japanese document '005 to include a pivot fixture (cantilever mechanism) as taught by Miller et al. to provide a means to support the thigh/calve sections in a coplanar position while pivoting downwardly below the horizontal plane of the bed.

13. Claims 112-117, 126 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese document '005 in view of Zur (US 4287620).

Japanese document '005 discloses the invention substantially as claimed. However, Japanese document '005 lacks a swing arm and armrest/desk/electrical and data

Art Unit: 3672

connections secured thereto. Zur teaches a swing arm and armrest/desk/electrical and data connections secured thereto (see Figs. 15,16). It would have been considered obvious to one of ordinary skill in the art to modify Japanese document '005 to include a swing arm and armrest/desk/electrical and data connections secured thereto as taught by Zur since such a modification increases the functionality of the bed.

14. Claims 119 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese document '005 in view of Roberts et al. (US5745940) and Reeder et al. (US6115861)

Japanese document '005 discloses the invention substantially as claimed. However, Japanese document '005 lacks a high coefficient of friction and low coefficient of friction. Roberts et al teaches a high coefficient of friction (100). Reeder et al. teaches low coefficient of friction (see col. 13). It would have been considered obvious to one of ordinary skill in the art to modify Japanese document '005 to include a high coefficient of friction and low coefficient of friction as taught by Roberts et al. and Reeder et al. in order to manipulate the mattress.

15. Claim 123 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese document '005 in view of Zur as applied to claim 113 above, and further in view of Johnston et al. (US 4409695).

Japanese document '005 (once modified) discloses the invention substantially as claimed. However, the (once modified) Japanese document '005 lacks a moveable footrest. Johnston et al. teaches a moveable footrest (see Fig. 1). It would have been

Art Unit: 3672

considered obvious to one of ordinary skill in the art to further modify the (once modified) Japanese document '005 to include a footrest as taught by Johnston et al. in order to provide support for the feet when the thigh/calve sections are pivoted downwardly.

16. Claims 124,127 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese document '005 in view of Zur as applied to claims 112,126 above, and further in view of Kleinwolterink (US 4290423)

Japanese document '005 (once modified) discloses the invention substantially as claimed. However, the (once modified) Japanese document '005 lacks a buttocks sling. Kleinwolterink teaches a buttocks sling (120). It would have been considered obvious to one of ordinary skill in the art to further modify the (once modified) Japanese document '005 to include a buttocks sling as taught by Kleinwolterink in order to assist a patient in a wheelchair to and from the bed.

17. Claim 127 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston et al. '695 in view of Kleinwolterink (US 4290423)

Johnston et al. discloses the invention substantially as claimed. However, Johnston et al. lacks a buttocks sling. Kleinwolterink teaches a buttocks sling (120). It would have been considered obvious to one of ordinary skill in the art to modify Johnston et al. to include a buttocks sling as taught by Kleinwolterink in order to assist a patient in a wheelchair to and from the bed.

Response to Arguments

18. Applicant's arguments with respect to claim 107 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil Singh whose telephone number is (571) 272-7051. The examiner can normally be reached on Monday through Friday 10:30 AM - 7:00 PM.

Art Unit: 3672

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sunil Singh/
Primary Examiner, Art Unit 3672

Sunil Singh
Primary Examiner
Art Unit 3672

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11/22/10